

**WHAT IS CLAIMED IS:**

1. A soundproofing and thermally insulating element comprising a panel of polyurethane rigid foam with a proportion of closed cells of more than 90%, with a surface having 1 to 18 depressions per square centimeter, the depressions having a diameter of from 0.1 to 10 mm and a depth of from 10 to 70 mm, wherein at least two types of depressions that differ in at least one dimension are present.
- 10 2. The element of Claim 1 in which depressions are present on both front and rear sides of the foam panel.
- 15 3. The element of Claim 2 in which the panel of polyurethane rigid foam is provided with an outer layer on the front or rear side.
4. The element of Claim 3 in which the outer layer is an aluminum foil or a mineral fiber fleece.
- 20 5. The element of Claim 4 in which the panel of closed-cell polyurethane rigid foam is provided with an outer layer on the front and rear sides.
6. The element of Claim 5 in which the outer layer on the front side of the foam panel is a different material than the outer layer on the rear side of the foam panel.
- 25 7. The element of Claim 1 in which the panel of polyurethane rigid foam is provided with an outer layer on its front and rear sides.
8. The element of Claim 7 in which the outer layer is an aluminum foil or mineral fiber fleece.

9. The element of Claim 8 in which the foam panel is provided with an outer layer on both its front and rear sides.
  
10. The element of Claim 9 in which the outer layer on the front side of the  
5 foam is a material different from that of the outer layer on the rear side of  
the foam.